



STIC Search Report

EIC 2100

STIC Database Tracking Number: 219951

TO: Andrew Chou
Location: RND 5B19
Art Unit: 2192
Tuesday, March 27, 2007

Case Serial Number: 10/619528

From: Byron T. Mims
Location: EIC 2100
RND-4B19
Phone: 272-3528

byron.mims@uspto.gov

Search Notes

Andrew

Enclosed are art findings that may be minimal interest, as items teaching specifically to your search request were not found. However, I have tagged as well as highlighted the enclosed retrieved items, which seemed most relevant. Let me know if there is anything in particular that you would like for me to pursue further.

Byron

2/27/07
4/4/07
4/7/07

STIC EIC 2100 Search Request Form

219951

(132)

Today's Date:

3/27/2007

What date would you like to use to limit the search?

Priority Date: 7/15/2003

Other:

Name Andrew Chen

AU 2192 Examiner # 81739

Room # 5B19 Phone 6825

Serial # 10614528

Format for Search Results (Circle One):

PAPER DISK EMAIL

Where have you searched so far?

USP DWPI EPO JPO ACM IBM TDB

IEEE INSPEC SPI Other EAST

Is this a "Fast & Focused" Search Request? (Circle One) YES NO

A "Fast & Focused" Search is completed in 2-3 hours (maximum). The search must be on a very specific topic and meet certain criteria. The criteria are posted in EIC2100 and on the EIC2100 NPL Web Page at <http://ptoweb/patents/stic/stic-tc2100.htm>.

What is the topic, novelty, motivation, utility, or other specific details defining the desired focus of this search? Please include the concepts, synonyms, keywords, acronyms, definitions, strategies, and anything else that helps to describe the topic. Please attach a copy of the abstract, background, brief summary, pertinent claims and any citations of relevant art you have found.

Is this request for a BOARD of APPEALS case? (Circle One) YES NO

Is this case a SPECIAL CASE? (Circle One) YES NO

- Method for structuring a procedure
- ~~Asy~~ Asynchronous coding systems
- Claims 1, 8

STIC Searcher DM Phone 2-3528

Date picked up 3/27/07 Date Completed 3/27/07



STIC Search Results Feedback Form

EIC 2100

Questions about the scope or the results of the search? Contact *the EIC searcher* or *contact:*

Alyson Dill, EIC 2100 Team Leader
272-3527, RND 4B28

Voluntary Results Feedback Form

➤ I am an examiner in Workgroup: Example: 2133

➤ Relevant prior art **found**, search results used as follows:

- ☐ 102 rejection
- ☐ 103 rejection
- ☐ Cited as being of interest.
- ☐ Helped examiner better understand the invention.
- ☐ Helped examiner better understand the state of the art in their technology.

Types of relevant prior art found:

- ☐ Foreign Patent(s)
- ☐ Non-Patent Literature
(Journal articles, conference proceedings, new product announcements etc.)

➤ Relevant prior art **not found**:

- ☐ Results verified the lack of relevant prior art (helped determine patentability).
- ☐ Results were not useful in determining patentability or understanding the invention.

Comments:

Drop off or send completed forms to STIC/EIC2100 RND 4B28



Set	Items	Description
S1	3255	PHASE(1N)PARAMETER? OR PHASE() (VARIABLE? OR VALUE?)
S2	10125819	LOGIC? OR DIRECTION? OR FUNCTION? ? OR RULE?? OR METHOD?? - OR PROCEDUR? OR FORMULA? OR STRATEG? OR INSTRUCTION?? OR EXPRESSION???
S3	313635	S2(5N) (UPDAT? OR UP() (DATE? ? OR DATING) OR MODIF? OR UPGRAD? OR REVIS? OR BETTER? OR ENHANC? OR IMPROV?)
S4	109259	(STRUCTUR? OR ARRANG? OR CONFIG? OR CONSTRUCT? OR ORDER? OR FLOW???) (7N) (SOFTWARE OR APPLICAT? OR APP? ? OR PROGRAM? OR - PROCEDUR? OR SUBPROCEDUR?)
S5	3841	S4(5N) (UPDAT? OR UP() (DATE? ? OR DATING) OR MODIF? OR UPGRAD? OR REVIS? OR BETTER? OR ENHANC? OR IMPROV?)
S6	101	S1 AND S3
S7	1	S6 AND S5
S8	2	S6 AND S4
S9	1	S5 AND S1
S10	21929	PHASE(2N)PARAMETER? OR PHASE(3N) (VARIABLE? OR VALUE?)
S11	101	S1 AND S3
S12	101	S11 OR S6
S13	5	S12 AND AC=US/PR AND AY=(2004:2007)/PR
S14	17	S12 AND AC=US AND AY=2004:2007
S15	9	S12 AND AC=US AND AY=(2004:2007)/PR
S16	53	S12 AND PY=2004:2007
S17	53	S13:S16
S18	48	S12 NOT S17
S19	0	S18 AND ASYNCHRON?(3N) (CODING OR CODE? ?)
S20	2	(S1 OR S10) AND ASYNCHRON?(5N) (CODING OR CODE? ?)
S21	1	S5 AND ASYNCHRON?(5N) (CODING OR CODE? ?)
S22	13	S4 AND ASYNCHRON?(5N) (CODING OR CODE? ?)
S23	13	S21:S22

File 350:Derwent WPIX 1963-2006/UD=200720

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File 347:JAPIO Dec 1976-2006/Nov(Updated 070228)

(c) 2007 JPO & JAPIO

18/69,K/2 (Item 2 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2007 The Thomson Corporation. All rts. reserv.

0012254507 - Drawing available
WPI ACC NO: 2002-194531/200225
XRPX Acc No: N2002-147706

Fast timing acquisition method for disc drive comprising an initial estimate of phase angle loaded into the digital phase lock loop phase interpolator

Patent Assignee: MAXTOR CORP (MAXT-N)

Inventor: BISHOP A; VEIGA E G

Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
US 6307696	B1	20011023	US 1999306222	A	19990506	200225 B

Priority Applications (no., kind, date): US 1999306222 A 19990506

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 6307696	B1	EN	19	12	

Alerting Abstract US B1

NOVELTY - An accurate initial estimate of phase angle is determined. This is used to initialize the voltage controlled oscillator phase (VCO) to that of the input signal before the phase lock loop commences normal operation, without having to halt and restart the sample clock. The estimate is formed by accumulating even and odd analog to digital converter (ADC) (622) samples over a selected integration period. These values are then used to access an arctan lookup table (740).

DESCRIPTION - INDEPENDENT CLAIMS are included for a digital timing loop circuit channel and a zero-phase (ZPR) circuit for use in a magnetic read channel

USE - For computer disc drives i.e. a digital zero-phase restart circuit

ADVANTAGE - Improved timing acquisition performance therefore timing overhead is reduced. Since ratios of even and odd ADC samples are used, gain variations and other analog tolerance issues are avoided

DESCRIPTION OF DRAWINGS - The drawing shows a simplified block diagram a digital zero-phase restart circuit

622 Analog to digital converter

740 Arc tan table

Title Terms/Index Terms/Additional Words: FAST; TIME; ACQUIRE; METHOD; DISC ; DRIVE; COMPRISE; INITIAL; ESTIMATE; PHASE; ANGLE; LOAD; DIGITAL; LOCK; LOOP; INTERPOLATION

Class Codes

International Classification (Main): G11B-005/09

File Segment: EPI;

DWPI Class: T03

Manual Codes (EPI/S-X): T03-A06C; T03-A08A; T03-J03C; T03-N01

Original Publication Data by Authority

Original Abstracts:

...is accomplished by first determining an accurate initial estimate of phase angle, and loading that **phase value** into the digital phase lock loop phase interpolator without having to halt and restart the...

Claims:

An improved method of fast timing acquisition of a preamble pattern input signal in a magnetic read channel, comprising the...

23/69,K/3 (Item 3 from file: 350)
DIALOG(R) File 350:Derwent WPIX
(c) 2007 The Thomson Corporation. All rts. reserv.

0014564621 - Drawing available
WPI ACC NO: 2004-746579/200473
Related WPI Acc No: 2003-660073
XRPX Acc No: N2004-589779

Computer input/output operation bypassing method for e.g. database, involves locating direct access commands within application ordered computer code, where commands are executed to bypass support of queued input/output commands

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC)

Inventor: GOODE D H; MALLOY W E

Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
US 20040199677	A1	20041007	US 200133810	A	20011218	200473 B
			US 2004824902	A	20040414	

Priority Applications (no., kind, date): US 200133810 A 20011218; US 2004824902 A 20040414

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 20040199677	A1	EN	15	5	Division of application US 200133810

Division of patent US 6754734

Alerting Abstract US A1

NOVELTY - The method involves using asynchronous direct input/output (I/O) access commands in an **application ordered** computer code. The commands included in the code are located. A support of queued I/O access commands of a computer are bypassed by executing the direct commands. The queued I/O access commands are bypassed when porting an application from computer operating system (110) to a different operating system.

DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- 1.a computer system for bypassing I/O operations included in a computer system
- 2.an article of manufacture with a program storage medium readable by a computer and employing more instructions by a computer for bypassing I/O operations included in the computer.

USE - Used for bypassing input/output operations in a computer that is associated with ported computer application e.g. database.

ADVANTAGE - The method bypasses the support of queued I/O access commands of the computer by executing the asynchronous direct I/O access commands, thus improving the performance of the complex application that issues random I/O requests.

DESCRIPTION OF DRAWINGS - The drawing shows a block diagram of a system for bypassing I/O operations.

- 110 Operating system
- 111 System-dependent code module
- 114 I/O subsystem
- 115 File system
- 118 User input

Title Terms/Index Terms/Additional Words: COMPUTER; INPUT; OUTPUT; OPERATE;

METHOD; DATABASE; LOCATE; DIRECT; ACCESS; COMMAND; APPLY; ORDER; CODE;
EXECUTE; SUPPORT; QUEUE

Class Codes

International Classification (Main): G06F-003/00

File Segment: EPI;

DWPI Class: T01

Manual Codes (EPI/S-X): T01-H05B2; T01-J05B4P; T01-S03

...input/output operation bypassing method for e.g. database, involves locating direct access commands within application ordered computer code, where commands are executed to bypass support of queued input/output commands

...NOVELTY - The method involves using asynchronous direct input/output (I/O) access commands in an application ordered computer code. The commands included in the code are located. A support of queued I...

Original Publication Data by Authority

Claims:

...computer, said computer having a computer program application that includes ordered computer code, said ordered computer code including I/O access commands, said computer being optimized for support of queued said I/O access commands, the method comprising: using...

...access commands in said application ordered computer code; locating said asynchronous direct I/O access commands that are included in said application ordered computer code; and bypassing said support of queued I/O access commands of said computer by executing said asynchronous direct I/O access commands.

Set	Items	Description
S1	23152	PHASE(3N)PARAMETER? OR PHASE(3N) (VARIABL? OR VALUE?)
S2	2377932	LOGIC? OR DIRECTION? OR FUNCTION? ? OR RULE?? OR METHOD?? - OR PROCEDUR? OR FORMULA? OR STRATEG? OR INSTRUCTION?? OR EXPR- SSION???
S3	412464	S2(5N) (UPDAT? OR UP() (DATE? ? OR DATING) OR MODIF? OR UPGR- AD? OR REVIS? OR BETTER? OR ENHANC? OR IMPROV?)
S4	342845	(STRUCTUR? OR ARRANG? OR CONFIG? OR CONSTRUCT? OR ORDER? OR FLOW???) (7N) (SOFTWARE OR APPLICAT? OR APP? ? OR PROGRAM? OR - PROCEDUR? OR SUBPROCEDUR? OR CODE? ? OR CODING)
S5	18123	S4(5N) (UPDAT? OR UP() (DATE? ? OR DATING) OR MODIF? OR UPGR- AD? OR REVIS? OR BETTER? OR ENHANC? OR IMPROV?)
S6	586	S1(100N)S3
S7	8	S6(100N)S5
S8	578	S6 NOT S7
S9	0	S8(100N)ASYNCHRON?(5N) (CODING OR CODE? ?)
S10	32	S1(100N)ASYNCHRON?(5N) (CODING OR CODE? ?)
S11	1	S10(100N)S3
S12	31	S10 NOT S11
S13	0	S12(100N)S5
S14	30	S12 NOT (AD>2003 OR AD=2004:2007)
S15	20	S1(100N)S5
S16	30	S14 NOT S15

File 348:EUROPEAN PATENTS 1978-2007/ 200708

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File 349:PCT FULLTEXT 1979-2007/UB=20070315UT=20070308

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14/5,K/5 (Item 5 from file: 348)
DIALOG(R) File 348:EUROPEAN PATENTS
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00897682

Fault isolation

Fehlereingrenzung

Localisation de fautes

PATENT ASSIGNEE:

Compaq Computer Corporation, (687792), 20555 S.H. 249, Houston Texas
77070, (US), (Proprietor designated states: all)

INVENTOR:

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Autor, Jeffrey S., 12514 Logan Mill, Houston, Texas 77070, (US)
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(US)

Rose, Eric E., 7010 Huntbrook Drive, Spring, Texas 77379, (US)

LEGAL REPRESENTATIVE:

Brunner, Michael John et al (28871), GILL JENNINGS & EVERY, Broadgate
House, 7 Eldon Street, London EC2M 7LH, (GB)

PATENT (CC, No, Kind, Date): EP 820012 A2 980121 (Basic)
EP 820012 A3 990113
EP 820012 B1 030507

APPLICATION (CC, No, Date): EP 97303790 970604;

PRIORITY (CC, No, Date): US 658750 960605

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS (V7): G06F-011/14

CITED PATENTS (EP B): GB 2292238 A

CITED REFERENCES (EP B):

"Isolating the SOURCE of Small Computer System Interface Bus Hang Error
at Run-Time" IBM TECHNICAL DISCLOSURE BULLETIN., vol. 39, no. 8, August
1996, page 61 XP000638138 NEW YORK US;

ABSTRACT EP 820012 A2

A device causing a faulty condition in a computer system having devices
is isolated by detecting for a faulty condition associated with the
devices and identifying the device causing the faulty condition. The
devices are coupled to a bus. The faulty condition includes a bus hang
condition. The devices are turned off when a bus hang condition is
detected. The devices are then turned back on to test the devices. Each
device is tested by writing and reading its configuration space.
Information on the bus associated with the faulty condition is stored.
The stored information is retrieved after the faulty condition has
occurred, with the stored information including address, data, and bus
control information.

ABSTRACT WORD COUNT: 115

NOTE:

Figure number on first page: 40

LEGAL STATUS (Type, Pub Date, Kind, Text):

Examination: 011010 A2 Date of dispatch of the first examination
report: 20010828

Application: 980121 A2 Published application (Alwith Search Report
;A2without Search Report)

Oppn None: 040428 B1 No opposition filed: 20040210

Grant: 030507 B1 Granted patent

Search Report: 990113 A3 Separate publication of the European or

International search report

Change: 990120 A2 International patent classification (change)

Examination: 990901 A2 Date of request for examination: 19990705

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	199804	968
CLAIMS B	(English)	200319	675
CLAIMS B	(German)	200319	667
CLAIMS B	(French)	200319	798
SPEC A	(English)	199804	59653
SPEC B	(English)	200319	59722
Total word count - document A			60629
Total word count - document B			61862
Total word count - documents A + B			122491

...SPECIFICATION data phase (i.e., when data(underscore)phase or next(underscore)data(underscore)phase, an **asynchronous** signal that sets the **value** of data(underscore) **phase** at the next CLK cycle, is asserted), the cable decoder 146 looks at the command **code** (cd(underscore)cmd(3:0)) sent across the cable to determine which queue should receive...

...that tells the DCQ to claim the transaction. When the three LSB of the command **code** signal (cd(underscore)cmd(2:0)) are "111", the transaction is a posted memory write...

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Set	Items	Description
S1	83838	PHASE(3N)PARAMETER? OR PHASE(3N)(VARIABLE? OR VALUE?)
S2	25591138	LOGIC? OR DIRECTION? OR FUNCTION? ? OR RULE?? OR METHOD?? - OR PROCEDUR? OR FORMULA? OR STRATEG? OR INSTRUCTION?? OR EXPRESSION???
S3	1019767	S2(5N)(UPDAT? OR UP() (DATE? ? OR DATING) OR MODIF? OR UPGRAD? OR REVIS? OR BETTER? OR ENHANC? OR IMPROV?)
S4	1010300	(STRUCTUR? OR ARRANG? OR CONFIG? OR CONSTRUCT? OR ORDER? OR FLOW??? OR MODULARIT?) (7N)(SOFTWARE OR APPLICAT? OR APP? ? OR PROGRAM? OR PROCEDUR? OR SUBPROCEDUR? OR CODE? ? OR CODING)
S5	33487	S4(5N)(UPDAT? OR UP() (DATE? ? OR DATING) OR MODIF? OR UPGRAD? OR REVIS? OR BETTER? OR ENHANC? OR IMPROV?)
S6	1484	S1 AND (S3 OR S5)
S7	0	S6 AND ASYNCHRON?(5N)(CODING OR CODE? ?)
S8	0	S6 AND (REDUC? OR ELIMINAT? OR ERADICAT? OR LESSEN?) (5N)(FAULT() ISOLAT?)
S9	43	S6 AND PHASE()PARAMETER?
S10	34	S9 NOT (PY>2003 OR PY=2004:2007)
S11	19	RD (unique items)
File	2:INSPEC 1898-2007/Mar W3	(c) 2007 Institution of Electrical Engineers
File	6:NTIS 1964-2007/Mar W4	(c) 2007 NTIS, Intl Cpyrght All Rights Res
File	8:Ei Compendex(R) 1884-2007/Mar W3	(c) 2007 Elsevier Eng. Info. Inc.
File	34:SciSearch(R) Cited Ref Sci 1990-2007/Mar W3	(c) 2007 The Thomson Corp
File	35:Dissertation Abs Online 1861-2007/Feb	(c) 2007 ProQuest Info&Learning
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File	60:ANTE: Abstracts in New Tech & Engineer 1966-2007/Mar	(c) 2007 CSA.
File	62:SPIN(R) 1975-2007/Mar W2	(c) 2007 American Institute of Physics
File	65:Inside Conferences 1993-2007/Mar 26	(c) 2007 BLDSC all rts. reserv.
File	94:JICST-EPlus 1985-2007/Apr W1	(c) 2007 Japan Science and Tech Corp(JST)
File	95:TEME-Technology & Management 1989-2007/Mar W3	(c) 2007 FIZ TECHNIK
File	99:Wilson Appl. Sci & Tech Abs 1983-2007/Feb	(c) 2007 The HW Wilson Co.
File	111:TGG Natl.Newspaper Index(SM) 1979-2007/Mar 22	(c) 2007 The Gale Group
File	144:Pascal 1973-2007/Mar W3	(c) 2007 INIST/CNRS
File	239:Mathsci 1940-2007/Apr	(c) 2007 American Mathematical Society
File	256:TecInfoSource 82-2007/Oct	(c) 2007 Info.Sources Inc
File	434:SciSearch(R) Cited Ref Sci 1974-1989/Dec	(c) 2006 The Thomson Corp
File	583:Gale Group Globalbase(TM) 1986-2002/Dec 13	(c) 2002 The Gale Group